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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/523,913	02/07/2005	Thomas Daniel	29827/40829	9466
<div>4743, 7590 06/29/2007 MARSHALL, GERSTEIN &amp; BORUN LLP 233 S. WACKER DRIVE, SUITE 6300 SEARS TOWER CHICAGO, IL 60606</div> <div>EXAMINER LISTVOYB, GREGORY</div> <div>ART UNIT PAPER NUMBER 1711</div> <div>MAIL DATE DELIVERY MODE 06/29/2007 PAPER</div>				

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

# Office Action Summary

Application No.

10/523,913

Applicant(s)

DANIEL ET AL.

Examiner

Gregory Listvoyb

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 07 February 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-12 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-12 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

## Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date 8/25/2005.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_.

## DETAILED ACTION

### *Claim Rejections - 35 USC § 102*

Claims 1-5 rejected under 35 U.S.C. 102(b) as being anticipated by Torii et al (US 2003/0069359) herein Torii.

Torii discloses a water absorbent comprising

- (a) particles of a water absorbent polymer, and
- (b) a nitrogenous polymer containing from 5 to 17 mol/kg, based on the total weight of the nitrogenous polymer, of protonatable nitrogen atoms (Commercial name CationfasrtPR8106 with protonable nitrogen content of 6.1 mol/kg (see Example 10 and Abstract). Most favorably, protonable nitrogen content is more than 6mol/kg (line 0159)

Regarding claims 2 and the nitrogenous polymer is a hydrolysis product of a homo- or copolymer of an N-vinylcarboxamide and/or N-vinylcarboximide (Catiofast PR (see Example 10 and Tables 2 and 3) used in the Application (see page 4, line 35 of the Application)).

Regarding Claims 3 Torii discloses a water absorbent (see discussion above) characterized

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a particle size distribution where more than 97% by weight of the particles are from 150 to 850  $\mu\text{m}$  in size,

a Saline Flow Conductivity (SFC) of at least  $30 \times 10^{-7} \text{ cm}^3/\text{g}$  (see Table 3),

a Ball Burst Strength (BBS) (30 min) of at least 50 gf (125 gf in Example 10, see Table 3),

a Ball Burst Strength (BBS 16hr) (16 h) of at least 80 gf (125 gf in Example 10, see Table 3),

and a quotient  $[\text{BBS (30 min)} - \text{BBS (16 h)}]/\text{BBS (30 min)}$  of less than 0.8 (equal to Zero, see Example 10 and Table 3).

In Examiner position, the Torii's polymer with 3% of particles with size less than 149  $\mu\text{m}$  is functionally identical to a polymer of the Application, where 2% of particles with size less than 100 $\mu\text{m}$ .

Since Torii and Application disclose the same nitrogenous polymer, the limitations of Claims 4 and 5 are inherently met. In addition, Taraii discloses that most favorable MW is at least 10000 Daltons (line 00157).

In reference to Claim 6, Torii teaches water absorbent comprising from 0.01 to 10%wt of the nitrogenous polymer, based on weight of water absorbent polymer ( see Claim 1).

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In reference to Claims 8 and 9, Torii discloses a water absorbent polymer comprising 0-50% wt monoethylenically unsaturated acrylic acid and 50-100% wt of its salt (see line 0115) and 0.005 to 5% of crosslinking agent (see line 0126), which can be added after polymerization (see line 0127).

Regarding Claims 10-11, the water absorbent further comprises a cellulose powder, which is applied onto the composition, which includes nitrogenous polymer (see line 0168).

In reference to Claim 12, Torii discloses a process comprising applying nitrogenous polymer onto particles of water absorbent and if necessary drying the water absorbent (see line 0171).

***Claim Rejections - 35 USC § 103***

Claim 7 rejected under 35 U.S.C. 103(a) as being unpatentable over Torii in combination with Nagasuna et al (US 2004/0019342) herein Nagasuna.

Torii discloses a water absorbent comprising

- (a) particles of a water absorbent polymer, and
- (b) a nitrogenous polymer (see discussion above).

Torii teaches finely divided silica, cellulose or borate particles (see line 0168), but does not specifically disclose a water absorbent, comprising finely divided insoluble inorganic salt.

Nagasuma discloses a water absorbent, comprising finely divided insoluble inorganic salt (see line 0157), which enhance the absorbent performance, such as in applications, where charged particles required.

Therefore, it would have been obvious to a person of ordinary skills in the art at the time the invention was made to add finely divided insoluble inorganic salt particles in Torii composition to enhance performance of the composition in specific applications, where charged particles are required.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Gregory Listvoyb whose telephone number is (571) 272-6105. The examiner can normally be reached on 9am-6pm.


If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, James Seidleck can be reached on (571) 272-1078. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Gregory Listvoyb  
Examiner  
Art Unit 1711

GL  
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James J. Seidleck  
Supervisory Patent Examiner  
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